

## EIP5 - 2011 Altona Environmental Action Plan

Ref No	Environmental Impact	Site	Objective	Plan	Details	Owner	Due Date
1.18	VOC & NOx	Olefins	Reduce VOC emissions	Reduce leakage from pump seals by installation of double seals	Installation of double seals on pumps on P-763 A/B, P-155 , P-213 & P-535B. Complete design for P-682 & P-683	Ole	Dec-11
3.15 (c)	Greenhouse Gases	Olefins	Reduce Greenhouse Gas emissions per unit of production where cost effective	Progress the EEO assessment	Complete the Olefins Energy Efficiency Opportunities assessment	SHE, Ole	Jun-11
3.26	Greenhouse Gases	All	Reduce Greenhouse Gas emissions per unit of production where cost effective	Install facilities to supply Resins steam from Olefins	Complete Olefins steam supply to polymers and commission	Ole, Res, Pla	Jun-11
3.28	Greenhouse Gases	Plastics	Reduce Greenhouse Gas emissions per unit of production where cost effective	Reduce energy consumption for the transport of product	Make 41 tonne blends of product to increase product shipment from 19.5 tonnes to 20.5 tonnes. (approx 200 less truck trips per annum)	Pla	Jun-11
3.29	Greenhouse Gases	Plastics	Reduce Greenhouse Gas emissions per unit of production where cost effective	Increase Plastics site steam efficiency	Steam system revamp as part of Plastics Dual Reactor shutdown program	Pla	Mar-11
3.30	Greenhouse Gases	Plastics	Reduce Greenhouse Gas emissions per unit of production where cost effective	Reduce energy consumption of RX2 recycle gas compressor	Compressor on Rx-2 speed reduction from 5960 rpm to 5760 rpm (power reduction of 20-30 kwh from current set-up and 240 kwh in total from when project began). This is the final phase of the speed reduction project and following this both compressors will be running at 5760 rpm.	Pla	Dec-11
3.31	Greenhouse Gases	Plastics	Reduce Greenhouse Gas emissions per unit of production where cost effective	Reduce energy consumption of effluent treated water pumps	Installation of more efficient pumps in the Waste Water Treatment Plant (effluent treated water pumps).	Pla	Mar-11
7.5	Odour	All	Determine source of plant odours	Conduct annual Odour Audit of each site	Conduct annual Odour Audit of each site (Ongoing item - same number as previous)	SHE	Jun-11
8.20	Transported Wastes	Olefins	Eliminate prescribed waste stream	Complete final de-sludge and clean out of Blue Pond	With BEAL unit closure completed, the final de-sludge and clean of the blue pond can be completed, eliminating copper sludge as a waste stream at Qenos	Ole	Jun-11
9.41 (b)	Water and Wastewater	Olefins, Plastics	Reduce fresh water consumption and Trade Waste volume	Develop design options for sour water re-use - Conduct evaluation trials	Complete evaluation of stage 1 facilities. Establish effective pH control of sour water at Olefins to maximise sour water re-use at Plastics	Ole, Pla	Dec-11
9.54	Water and Wastewater	Olefins	Reduce fresh water consumption	Commission Recycled water supply to Olefins	Commission recycled water to Olefins and achieve supply contract commitments on recycled water volumes.	Ole	Sep-11
9.6	Water and Wastewater	Olefins	Reduce fresh water consumption	Remove seal flush water from P-681A	The seal flush water from the P-681A seals drains to the process sewer. The seal flush is no longer required with the modern seal technology	Ole	Mar-11
10.27	Soil and Groundwater	All	Maintain EPA compliance on groundwater	Conduct annual groundwater monitoring	Conduct annual groundwater monitoring (On-going item - same number as previous)	SHE	Dec-11
10.28	Soil and Groundwater	Olefins	Reduce risk of contamination	Improve protection of stormwater	Expansion of the storm water pond hold up capacity by increasing the height of the walls.	Ole	Dec-11
10.29	Soil and Groundwater	Olefins	Reduce risk of contamination	Improve protection of stormwater	Divert Storm water drain at Diesel bowser to Dirty water sewer	Ole	Sep-11
11.14	Flares	Olefins	Reduce flare impact on community	Assess flare noise level performance	Carry out annual flare noise testing to verify flare tip noise performance is at baseline	SHE	Jun-11
11.18	Flares	Olefins	Reduce flare impact on community	Complete scoping study for flare gas analysis	Complete scoping analysis to decide whether an analyser is required on the flare header for management of flare gas combustibility.	Ole	Jun-11
11.20	Flares	Olefins	Reduce flare impact on community	Review flaring events to identify potential flaring reductions	Reviewed Planned Flare Events As Per Olefins Flare Analysis and review Flare Alert Tool Data And Identify Improvement Opportunities to reduce. Assess whether flare impact has been reduced to an acceptable level and whether further flare risk reduction is needed.	Ole	Dec-11
11.21	Flares	Olefins	Reduce flare impact on community	Install new flare tip	Installation and commission new flare tip design on normal capacity flare	Ole	Jun-11
14.8	Training	All	Train personnel in environmental compliance	Complete Environmental Awareness sessions	Conduct annual Environmental & Sustainability Awareness training sessions	SHE	Sep-11
16.14	Environmental Audit and Assessments	All	Update EIP documentation to match current EPA requirements	Update EIP framework into an evergreen document recognising the Annual EAP process	Simplify EIP framework documentation to be evergreen. Work with EPA to develop consistent with regulatory burden to reduce red tape.	SHE	Jun-11

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16.15	Environmental Audit and Assessments	Olefins	Reduce environmental risks at Qenos	Carry out Environmental Risk Re assessment for Offsites and Utilities	Perform an environmental risk re assessment of the Offsites and Utilities area. The assessment will be performed using the procedure updated in 2010 which will perform a quantitative risk assesemnt of controls for high consequence events.	SHE	Jun-11
16.16	Environmental Audit and Assessments	All	Reduce environmental risks at Qenos	Accredited license audit.	Mid term Accredited license audit completed.	SHE	Dec-11
16.17	Environmental Audit and Assessments	Olefins & Plastics	Reduce environmental risks at Qenos	Complete turnarounds with Zero Environmental reportable events	Implement turnaround SHE plans and carry out Environmental patrols during key activity periods.	Ole, Pla,SHE	Mar-11